

**Amendments to the Claims:**

*This listing of claims will replace all prior versions, and listings, of claims in the application:*

**1. (Currently Amended)** A method for measuring temperature at a site within a patient during a medical procedure, the method comprising the steps of:

providing a medical device having a position sensor for providing signals used in determining position and/or orientation coordinates of the position sensor;

placing the medical device within the patient and positioning the position sensor at the site;

determining position and/or orientation coordinates of the position sensor based on the signals provided by the position sensor using a location system;

providing a temperature measurement signal to the position sensor;

measuring voltage at the position sensor;

determining a resistance value at the position sensor based on the temperature measurement signal provided to the position sensor and the voltage at the position sensor; and

determining a temperature value at the position sensor based on the resistance value at the position sensor.

**2. (Original)** The method according to Claim 1, further comprising determining the temperature value based on an algorithm.

**3. (Original)** The method according to Claim 2, further comprising providing a resistance drift factor to the resistance value in accordance with the algorithm.

**4. (Previously Presented)** The method according to Claim 1, further comprising generating an externally applied field at a desired site within the patient for performing the medical procedure at the desired site within the patient.

5. **(Previously Presented)** The method according to Claim 4, further comprising using a generator signal for generating the externally applied field, wherein the generator signal is at a different frequency than the temperature measurement signal.
6. **(Original)** The method according to Claim 5, wherein the generator signal is used to generate an AC magnetic field.
7. **(Original)** The method according to Claim 6, wherein the generator signal is 3 KHz.
8. **(Original)** The method according to Claim 7, wherein the temperature measurement signal is 4 KHz.
9. **(Original)** The method according to Claim 1, further comprising using a signal processor for measuring the voltage at the position sensor.
10. **(Original)** The method according to Claim 9, further comprising determining the resistance value using the signal processor.
11. **(Original)** The method according to Claim 10, further comprising determining the temperature value using the signal processor.
12. **(Original)** The method according to Claim 11, further comprising performing an ablation procedure at the site with the medical device.
13. **(Previously Presented)** A method for adjusting for temperature sensitivity of a medical device having a position sensor, the method comprising the steps of:
- providing a medical device having a position sensor for providing signals used in determining position and/or orientation coordinates of the position sensor;
  - determining position and/or orientation coordinates of the position sensor based on the signals provided by the position sensor using a location system;

measuring voltage at the position sensor;  
determining a resistance value at the position sensor based on the measured voltage at the position sensor;  
determining a temperature value at the position sensor based on the resistance value; and  
determining a sensitivity at the position sensor based on the temperature value.

14. **(Original)** The method according to Claim 13, further comprising adjusting location information from the position sensor based on the sensitivity.

15. **(Original)** The method according to Claim 14, further comprising adjusting position and orientation coordinates from the position sensor based on the sensitivity.

16. **(Original)** The method according to Claim 15, further comprising determining the temperature value at the position sensor by applying a resistance drift factor to the resistance value.

17. **(Original)** The method according to Claim 16, further comprising recalling the resistance drift factor from a memory of a signal processor.

18. **(Original)** The method according to Claim 17, further comprising establishing the resistance drift factor from a resistance versus temperature profile of the position sensor.

19. **(Original)** The method according to Claim 15, further comprising determining the sensitivity at the position sensor by applying a sensitivity drift factor to the temperature value.

20. **(Original)** The method according to Claim 19, further comprising recalling the sensitivity drift factor from a memory of a signal processor.

21. **(Original)** The method according to Claim 20, further comprising establishing the sensitivity drift factor from a sensitivity versus temperature profile of the position sensor.